

Planned Course: Honors Geometry		Course Number: M307H	Department: Mathematics
Unit: Similarity		Grade Level: 9-12	
Estimated Time: 14 days		Level/Track: Honors	Date Approved: 7/15/08
PA Academic Standards	Core Concepts (in question format) • Skills/Knowledge	Activities/Strategies/Study Skills (identify some activities as remedial or enrichment activities)	Assessments (include types and topics)

<p>ASSESSMENT ANCHORS M11.A.2.1 Apply ratio and/or proportions in problem-solving situations. M11.C.1.3 Use properties of congruence, correspondence and similarity in problem-solving settings involving two- and three-dimensional Figures. M11.C.1.2 Recognize and/or apply properties of angles, triangles, and quadrilaterals.</p> <p>ACADEMIC STANDARDS 2.9.11 Geometry B. Prove that two triangles or two polygons are congruent or similar using algebraic, coordinate and deductive proofs.</p> <p>2.5.11 Mathematical Problem Solving and Communication C. Present mathematical procedures and results clearly, systematically, succinctly and correctly.</p>	<p>► What is the relationship between the corresponding sides and angles of similar polygons?</p> <ul style="list-style-type: none"> • Student will be able to set up and solve proportions that are derived from similar polygons. • Student will be able to apply the theorems that arise when the altitude is drawn to the hypotenuse in a right triangle. 	<p>► The student will set up proportions and solve them</p> <p>► The student will prove triangles are similar by AA, SAS, and SSS.</p> <p>► The student will derive the proportions that arise from the similar triangles formed when the altitude is drawn to the hypotenuse of a right triangle.</p> <p>► The student will apply the Side-Splitter Theorem and the Triangle Angle Bisector Theorem.</p> <p>► The student will analyze diagrams to determine missing information by setting up various proportions.</p>	<p>► Graded assignments</p> <p>► Classroom observation and/or participation</p> <p>► Quiz</p> <p>► Test</p>
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